"UCLA SPORE IN LUNG CANCER - Core 1: Clinical "A Phase I/II Trial Evaluating Intratumoral Injection of Interleukin-7 Gene Modified Autologous Dendritic Cells for the Treatment of Non-Small Cell Lung Cancer,"

Non-Technical Abstract

Lung cancer is the leading cause of cancer-related death in the United States. Treatment for lung cancer can involve surgery to remove the tumor, chemotherapy, and/or radiation therapy to kill tumor cells. Unfortunately, for most people with lung cancer (85% of patients), these treatments are unable to cure the tumor. A new type of therapy called gene therapy is being developed to treat lung cancer. A gene is a piece of deoxyribonucleic acid (DNA) that directs the production of a particular protein in your cells. In this study, we will be introducing a gene that will cause the cells to make the protein Interleukin-7 (IL-7). This substance, IL-7, is part of the normal human immune system. The gene is delivered to cells of the immune system (dendritic cells) by a modified cold virus (Ad). Administration of modified dendritic cells into animals (mice) has shown regression and cure of lung cancers. The purpose of this study is to determine whether this type of treatment can be safe and effective in treating humans with lung cancer.